

ABSTRACT

An improved solenoid valve assembly for controlling fluid flow having a valve body with an inlet and outlet, a diaphragm assembly with passages for providing fluid communication between the inlet and the outlet, and a movable seal pad responsive to an external signal for controlling flow through one of the passages. The improvement has the diaphragm assembly including a symmetrical fluid flow restrictor movable within the valve body, with a head portion, an intermediate portion and a guide portion surrounding a main body portion. The head portion has a first end of the pilot passage which extends through the main body portion. The intermediate portion includes an annular extension with an upper side and a lower side. The guide portion has a plurality of legs extending from the main body portion for a distance substantially equal to the outer diameter of the annular extension, and is spaced from and interconnected with the intermediate portion by reduced diameter gullet portion.